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CHANGING CONCEPTS IN MOSQUITO CONTROL AND PUBLIC HEALTH*

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It pleases me to appear before your association to extend a welcome in behalf of our department and to present remarks on the occasion of your association's twenty-fifth anniversary. Chronologically speaking, you have reached a milestone in your organized efforts (to quote from your slogan) in "service of the public health and comfort through advancing effective mosquito control."

Although our department has maintained a relationship with mosquito control since its inception in the State approximately 50 years ago, our closest association has existed during the past decade. Since the advent of the subvention program in 1946, we have journeyed an eventful course together and I am personally delighted to recognize the significant advances which have been made within your group in this short span of time. The enlarging professional outlook which characterizes today's mosquito abatement program in California is truly worthy of acknowledgement and recognition. This salutation is by no means intended to suggest that any relaxation or resting upon present accomplishments is possible; rather, it is an expression of commendation to the sincerity and conscientious application which you mosquito abatement workers have demonstrated in meeting the difficulties of the past 10 years, which have been characterized by a drastically expanding problem.

Expanding Problem

The task before the mosquito abatement forces in the State is a great one. In view of the prospect for at least a doubling of the present 8,000,000 acres, and the increasing liquid waste problems which characterize expanding industry and growing communities, the potential of the mosquito problem might almost be regarded as formidable. It is our optimistic outlook, however, that through your effectively organized and operated programs this significant public health problem can and will be resolved.

This should certainly serve to indicate that we regard mosquito abatement agencies as part of the team of public health. We have come to consider the function of mosquito abatement as an integral part of environmental sanitation. The broad public health program which we know today has gradually acquired the responsibilities which pertain to human disease and conditions of physical ill-being. It has also been characteristic of public health development that due to financial limitations certain priorities have had to be recognized. This has always meant doing first things first. Accordingly in the field of mosquito control throughout the world, those vectors of malaria, yellow fever, dengue fever, filariasis, and encephalitis have understandably received primary attention from public health agencies. Today we are fortunate in being able to say that, with the significant exception of encephalitis, these diseases are not objects of public concern in California.

New Definitions Needed

We must also be responsive to the constant changes taking place in our physical and social environment, which require revised, if not new, definitions of public health. Today we find ourselves as public health workers justifiably obliged to direct significant effort toward the prevention of conditions and practices which lead to malnutrition, substandard housing, home accidents, alcoholism, air pollution, and excessive levels of noxious pests—including mosquitos. All of these conditions, if permitted to continue, ultimately lead to significant impairment of physical or mental well-being. This broadened outlook in public health is not peculiar to the State of California or even to the Nation.

The constitution of the World Health Organization, for example, reads: "Public health is a state of complete physical, mental, and social well-being and not merely the absence of disease and infirmity." The U. S. Public Health Service some years ago went on record as recognizing pest mosquitos to be clearly in the realm of public health whenever they occur in such a degree of prevalence as to impair normal living. This concept must take into account the use of the out-of-doors in the vicinity of the home and the variety of situations where man must work to earn his livelihood, as well as recreational areas. Certainly we in California have had to recognize that a substantial part of our State is characterized by a mosquito problem which clearly impairs normal living. We have also had to

* Presented before the 25th Annual Conference of the California Mosquito Control Association, San Jose, California, January 21, 1957.

recognize that the public looks to and expects local mosquito abatement agencies to protect it against this adverse influence on their health and comfort. In no way does such a recognition imply attention to pest mosquitos to the exclusion of vector mosquitos. In California the separation of these two entities as programs is exceedingly difficult from an administrative standpoint. The wide choice of habitat of *Culex tarsalis*, primary vector of encephalitis in California, and its general distribution throughout the State wherever mosquitos occur, makes abatement of all mosquito species which adversely affect the public well-being the most realistic approach to the problem.

New Sources of Mosquito Problem

In contrast with the past, we are now facing a situation in which mosquito problems arise largely from water used for agricultural, industrial, or community purposes. As is the case with mosquito abatement, the field of public health has a broad interest in water far beyond that of assuring its potability for drinking purposes. Both groups consult on diverse and related aspects of water management in the public interest. Further, water pollution control legislation identifies prolific mosquito production as "contamination" or "pollution" depending upon whether vector or pest species occur as a result of disposal of liquid wastes (including excess irrigation water). Responsibility for abating contaminations on an emergency basis rests with public health agencies. Water pollution control boards have the duty to control "pollutions." Mosquito abatement districts, of course, are empowered within their own statute, to engage in corrective, preventive and emergency action against mosquitos. The kind of preventive planning which is so important to the present and future mosquito abatement program is equally important to other endeavors in environmental sanitation. Cooperative and integrated working relationships between official agencies are essential to achieve mosquito abatement and sanitation objectives.

Mosquito Source Reduction Emphasized

Along the line of environmental measures, I am pleased to acknowl-

edge and recognize the increasing emphasis upon mosquito source reduction by most mosquito abatement agencies in the State. Those agencies participating in the subvention program have had as a guide, since, 1949, the "Standards and Recommendations for Local Mosquito Control Agencies," adopted that year by the State Board of Health. It is gratifying to recognize that the "Basic Principles" contained in these standards, which I quote in part, "A primary program shall be continuously carried on based on the incorporation of measures aimed at progressive reduction of known mosquito breeding sources," were in effect even before mosquito resistance to the "miracle" insecticides became a general reality. This mention is made to illustrate that the emphasis on mosquito source reduction has not been one resulting from desperation, but rather that it underlies all soundly operated mosquito abatement programs of the past, the present, and undoubtedly, the future.

A brief reference to the statute under which mosquito abatement districts operate also seems appropriate. The powers granted to a board of trustees provide them with almost endless flexibility for exercising discretion in selecting the most effective means to deal with the wide variety of problems confronting every district. The optional exercise of educational, cooperative, inter-agency, legal and direct abatement methods by the district enables virtually every existing problem to be ultimately resolved.

Perhaps of equal if not even greater importance than abating existing sources, however, is a program of preventive planning aimed at heading off potential problems in prospect from water resources, industrial and community developments. This can best be achieved by your participating in water use planning within your local jurisdiction.

Preventive Planning

We well recognize the importance of our department's role in preventive planning at a state and federal level. In this regard, a recent survey of our Bureau of Vector Control by the State Department of Finance resulted in inclusion in the department budget for the coming year a Water Projects

Consultant, effective July 1, 1957. If approved by the Legislature he will be assigned the responsibility of negotiating with state and federal agencies to assure that mosquito preventive measures are incorporated into water development plans throughout the State. This specialist will also attempt to bridge the gap between the water development agencies and local mosquito abatement programs by making available to you pertinent information regarding planning under way in various sections of the State. We still sorely feel the need for increased consultation and service to local programs on mosquito source reduction planning and demonstrations. Although we have thus far not been granted additional personnel for this purpose, we will do our best to expand this activity within the existing resources of the Bureau of Vector Control.

Another need recognized and approved by the Department of Finance is that of a supervisory scientist position in conjunction with the research activities on the vector problems of the State. This position, also hopefully to be effective July 1, 1957, will be expected to perform a coordinating and technical guidance function for the mosquito control investigations. This should result in maximum utilization of the department's resources as well as those of the local mosquito abatement agencies and other cooperating institutions and agencies. The Department of Finance survey, as well as a technical review conducted simultaneously by the Communicable Disease Center of the Public Health Service, supplied both sanction and endorsement of the mosquito research projects currently under way. We must recognize that this research program has been operating under conditions of extreme hardship and uncertainty in the past. This is the unfortunate lot of many new programs in the early phase of development. It is our firm belief, however, that this modest investigational effort will prove to be a sound investment of funds and time. The sustained support which your association has patiently given to this vital activity has been gratifying to observe. It is my conviction that the scientific research staff in this program is laboring industriously on work which is basic to the ultimate solutions of our mosquito

control problems. It is virtually impossible to establish a timetable for production in any research undertaking. Nevertheless, it is a fact that only through diligent application of competent research scientists to these tasks that the needed technological advances are made. I urge you to continue your support of this program, and to the scientists who are dedicated to obtaining solutions, if indeed solutions are to be had. I reiterate that progress never comes if we stand still or otherwise fail to utilize the course of scientific procedure in seeking to achieve it.

Eligibility for Subvention

Another matter of interest to you all, I am sure, is the stated viewpoint of the Department of Finance and the Legislative Auditor's Office, shared by our department, concerning the conditions of eligibility of local agencies for subvention. Concurrence exists that only those agencies with a critical need for subvention will be regarded eligible in the future for operational support. This does not pertain to eligibility to receive a basic allocation. Accordingly, it is our proposal to confine operational support during the next Fiscal Year to those agencies operating at a tax rate of 15 cents per \$100 assessed valuation or higher. The balance of the factors of the present formula would continue to apply. This new policy on subvention is based on a number of considerations, chief of which is an obligation to bring mosquito subvention into conformity with basic principles governing state subvention in general.

Relationship Between M. A. D. and Disaster Planning

I should next like to shift to the matter of disaster planning. It is my understanding that thus far local mosquito abatement districts across the State have not been integrated into the medical and health activities of this program. It need hardly be mentioned that the personnel and equipment resources which exist within the agencies comprising your association are of incalculable importance to the people of our State in the event of either extreme artificial or natural disaster. Briefly stated, the state disaster plan imposes a tremendous responsibility on our department. Dur-

ing normal times, the Medical and Health Division of the California Disaster Office is a division in the Department of Public Health. This division is responsible for developing the plan for utilizing needed personnel, equipment and material resources which are depended upon whenever a disaster arises. That portion of the planned program which most directly concerns the mosquito control agencies is associated with the areas of vector control and decontamination. Our Bureau of Vector Control is charged with directing and carrying out such activities within the regional and local disaster offices. The California Pest Control Operators Association has already volunteered its services to assist the Bureau of Vector Control staff in emergency vector control and decontamination activities in the event of disaster. In addition, it is hoped and herewith proposed that the California Mosquito Control Association, through its member agencies, will likewise volunteer its services to these important functions. This can be accomplished by contacting your respective local or county Civil Defense Office and requesting assignment in medical and health services. Provision will thereupon be made to assure use of your personnel in vector control and decontamination functions. As part of your local civil defense and disaster organization, your resources would first of all be used to protect your immediate locality if disaster occurred there. Should the need exist for service elsewhere in the State in the absence of local disaster, your services in vector control and decontamination would be assured elsewhere.

Enrollment in an official local civil defense and disaster organization now, before an "extreme emergency" exists, in addition to serving the people of our State, also provides the following advantages for mosquito abatement districts and their personnel:

1. All enrolled employees automatically become eligible for state workmen's compensation should they be injured while serving as disaster service workers or while engaging in disaster training activities.

2. Through the medium of predisaster planning you become eligible for rapid reimbursement for goods and services expended, as provided for in

Bulletin No. 106 and Supplement, California Disaster Office.

3. Mosquito abatement districts may acquire federal surplus property by submitting requests through the accredited local or county civil defense and disaster organization in which they are enrolled. This program was initiated in November, 1956, and is covered in detail in Bulletin No. 39 of the California Disaster Office.

4. Possession of civil defense identification cards, issued in advance of disaster, permits immediate movement of holder during civil defense emergencies. These passes usually authorize holders to pass traffic control points to perform their duties.

Mosquito Control in 1957

What is in store for mosquito control agencies in 1957? Although it sometimes seems to avail little in California, it is always well to look in retrospect at what has recently happened. A glimpse at 1956 shows that California was consistent with respect to having unusual weather. We experienced one of our most rugged winters in history in which floods left destruction in several areas throughout the State. An above-normal snow pack was experienced in the mountains of Northern and Central California. If a normal rainfall had continued, threat of a serious spring flood prevailed in the Central Valley. However, a subnormal rainfall followed to dissipate this danger. A moderate summer with only a limited period of high temperatures ultimately gave way to autumn and the subsidence of a moderate mosquito season. Thus far this winter, we have been faced with perhaps the weirdest drought in the past 100 years.

During 1956 only 21 cases of mosquito-borne encephalitis were confirmed in our laboratory. Fourteen of these were Western Equine and the remaining seven, St. Louis encephalitis. Of 1,047 mosquito pools tested in Sutter, San Joaquin, Fresno and Kern Counties, only two isolations of St. Louis virus were made. One hundred forty-three pools yielded Western Equine virus and 27 pools showed the recently discovered "X" encephalitis virus. In addition, only six confirmed cases of encephalitis in horses were reported in 1956. An additional 51 suspected cases in horses have also

been reported. With respect to malaria, only four cases have been confirmed as indigenous. Thus, California experienced one of the lightest years of mosquito-borne disease occurrence in its history, with 1956 being the second consecutive year of a relatively low incidence. To just what combination of circumstances this may be attributed, remains speculative. Accordingly, what will develop this year defies prediction.

These remarks have attempted to encompass a considerable range of our common interests. The substance of what I have tried to convey suggests our need to stand back, now and then, and take an objective look at ourselves, our programs, and our progress. We certainly find this to be necessary in the sharply defined public health programs for which our department shares responsibility. It would be a satisfaction and justifiable plagiarism if we could say: " * * * In public health * * * and in mosquito control * * * progress is our most important product."

It is estimated that sales for tranquilizers in the United States will surpass \$200,000,000 in 1957.—*News Release.*

SPECIAL CENSUS RELEASES *

Special Census of California cities, **Series P-28 Santa Clara County:** San Jose (968); **Orange County:** Santa Ana (969); **Anaheim (970); Imperial County:** Calipatria (973); **Fresno County:** Clovis (973); **Merced County:** Dos Palos (973); **Stanislaus County:** Patterson (973); **Contra Costa County:** Pinole (973).

Copies of these releases may be obtained from: Library, Bureau of Foreign and Domestic Commerce, United States Department of Commerce at 419 Customs Building, 555 Battery Street, San Francisco, California or at Room 450, 1031 South Broadway, Los Angeles, California.

* In ordering, specify series and number as shown in parentheses. These numbers are not population figures.

Fourth Outbreak of *S. Typhimurium* Traced to Food Handlers

Four successive outbreaks of *Salmonella typhimurium* food poisoning have been traced to food handlers at a private club in Los Angeles County. Investigation following the last outbreak reported, involving 81 persons, showed that three of the five employees were employed at three previous banquets associated with cases of salmonellosis. (See previous issues of *California's Health*.)

Onset of symptoms was from 9 to 98 hours and consisted of high fever, diarrhea, nausea, chills, disturbed vision, numbness and fainting. Average duration of the symptoms was from two to four days.

Roast turkey and baked ham were placed on unrefrigerated serving tables approximately two hours before the banquet. Potato salad was prepared the day before the banquet and held under refrigeration until served. Serving of the meal was delayed one hour beyond the scheduled time.

No laboratory specimens were collected; however, the reported illness in two children who ate turkey sandwiches prepared from the left-over turkey indicated contamination of the turkey. It is quite possible that other foods may have been contaminated.

Two Staph Outbreaks Reported

An outbreak of food poisoning in a boys camp in Santa Barbara County has been reported to the California State Department of Public Health. Pork transported in a private automobile was the suspected food. Laboratory examination showed the roast pork and gravy to be positive for *Staphylococci*.

The meat was reheated and reserved over a period of several days. Onset of symptoms was from three to four hours after eating and lasted for approximately one day.

A second outbreak occurred in a San Francisco restaurant in which the temperature of the steam table was insufficient. Temperature of the steam table at the time of investigation was 98 degrees. Laboratory examination of the suspected food, canned smoked ham served in sandwiches, proved it to be positive for hemolytic *Staphylococcus aureus*.

Industrial Sanitation Course Offered

A Training Course in Industrial Sanitation for sanitation personnel in local health departments, scheduled for June 10th through 25th in Los Angeles, is being sponsored by the Bureau of Adult Health, California State Department of Public Health. Cooperating agencies on this initial program are the Occupational Health Divisions of the U. S. Public Health Service and the Los Angeles City Health Department.

The course includes seven days of lecture and laboratory work dealing with chemical, physical and biological occupational hazards; evaluation of these hazards and methods of control; basic concepts of occupational health; and records and reports. This is to be followed by five days of individual field training under the direction of district industrial sanitarians and industrial hygienists in actual field investigations.

To provide this total individual training, 10 sanitarians from specific problem areas have been selected for the complete course. This limitation was necessitated by the laboratory space, instruments, and trained field personnel available. However, an open invitation is extended to health officers, administrative personnel and selected staff members of the local health departments to attend the meetings on June 10th-14th.

It is anticipated that this training course will be a continuing program of the Bureau of Adult Health. Present plans call for the Institute to be repeated in the Bay Area early in 1958, then to alternate biannually between the northern and southern areas of the State as long as the need is indicated.

Program notices will be released in the near future to all local health jurisdictions in the southern area. For further information contact the Bureau of Adult Health, State Department of Public Health, 2151 Berkeley Way, Berkeley 4.

Symptoms consisting of nausea, diarrhea and abdominal pains occurred approximately one to two hours after eating.

New VD Case Finding Program Begun

Diagnostic and treatment services for syphilis will be provided for the benefit of an estimated 50,000 Mexican National contract farm laborers between April 15th and June 30th at the El Centro Reception Center of the U. S. Department of Labor in Imperial County. Facilities will be provided on a trial basis by the Venereal Disease Branch of the U. S. Public Health Service in cooperation with representatives of Mexico and other interested groups.

As planned, this program will require only limited participation by local health departments compared to previous years, since both diagnosis and treatment will be provided by a medical unit working at the center.

The program differs from past programs in three major respects:

One, a newly developed rapid serologic test for syphilis will be performed in a field laboratory to be set up at the center.

Two, those individuals screened out as positive reactors, who upon further examination are found to be in need of treatment, will be treated for syphilis by the Public Health Service team prior to leaving the center.

Finally, darkfield examinations for *T. Pallida* will be done at the center when indicated.

If this trial program is successful, present plans call for adoption of the procedures used as part of the routine health examinations performed at each of the five reception centers along the U. S.-Mexican border.

In past surveys 8 to 10 percent of these farm laborers have had positive reactions to serologic tests for syphilis.

First Leash Law?

"So great was the menace (hydrophobia), that a decree was passed that no man should keep more than two dogs, and that both should be securely tied. The others were poisoned." This occurred in 1838 in Pueblo, later renamed Los Angeles. Taken from: *John Marsh, Pioneer* by George D. Lyman. Published by Scribner, New York City, 1930.

Each year nearly 50,000 California children receive medical services under the state and county CC program.

High Free Residual Chlorine Effective

The use of high free residual chlorine in swimming pools disposes of the need for standard bacterial tests, according to Dr. Elizabeth D. Robinton and Louise R. Elliot of Smith College, and Eric W. Mood of Yale University.

Tests conducted on samples from four swimming pools under varying conditions show that high free residual chlorination produces water free of pathogenic bacteria. If accurate titrations of the chlorine residuals are carried out routinely, they stated, bacterial standards need not be used to determine the safety of swimming pool water.

This new concept grew out of a search for a procedure that would keep pace with the latest developments in swimming pool water treatment. Accepted bacterial tests, they said, are not sufficiently delicate or precise to determine the relatively few organisms which survive high free residual chlorination.

Such chlorination, a relatively new treatment in the United States, is effective even during peak swimming loads and is easy to maintain. Also, they pointed out, free chlorine residuals eliminate the chance that a swimming pool will transmit bacterial disease. Levels of chlorination can be almost immediately ascertained, but bacterial tests may take 48 hours or more.

Orange County Man Dies of Rabies; Is 106th Recorded Death

The 106th recorded human death due to rabies occurred in Orange County last month. The victim, a resident of Anaheim, was bitten by his dog last July; however, the source of infection is indefinite. The dog disappeared that month. The dog also bit the man's son, who is currently under preventive treatment. The son said his father has always befriended strays and it is quite possible he was bitten by some other animal.

The victim became ill on April 7th, complaining of headache and nausea; he also experienced difficulty in swallowing. He was admitted to the Anaheim Hospital where he seemingly improved. On April 9th, he became quite apprehensive, evincing fear of

water. On April 11th he went berserk and escaped from the hospital breaking out of a glass door. The hospital staff, unable to restrain him, summoned police who took him to the Orange County Hospital where he died on April 11th. The Orange County Hospital resident was the first to suspect rabies.

At least 18 people, physicians, nurses, and police, are undergoing "Pasteur" treatment as a result of being in contact with the patient.

The last known human death due to rabies occurred in 1954, when a Bakersfield woman was bitten by a skunk in Tulare County and subsequently died.

In California, for the period 1910-1956, there has been one human death from rabies for every 223 recorded cases of animal rabies.

As of April 30, 1957, there have been 52 reported cases of animal rabies. Of these five occurred in dogs, 39 in skunks, six in bovine animals, and one each in cats and foxes.

The following table summarizes cases of animal rabies in California by county and species.

CASES OF ANIMAL RABIES BY SPECIES AND COUNTY—CALIFORNIA

January 1-April 30, 1957
(Tentative)

County	Total	Dog	Skunk	Bovine	Cat	Fox
California total....	52	5	39	6	1	1
Alameda.....	1	--	1	--	--	--
Butte.....	3	--	3	--	--	--
Colusa.....	3	--	3	--	--	--
El Dorado.....	1	--	1	--	--	--
Glenn.....	5	--	1	4	--	--
Lake.....	1	--	1	--	--	--
Los Angeles.....	6	4	--	--	1	1
Madera.....	7	--	5	2	--	--
Mariposa.....	2	--	2	--	--	--
Mendocino.....	1	1	--	--	--	--
Merced.....	1	--	1	--	--	--
Nevada.....	2	--	2	--	--	--
Placer.....	2	--	2	--	--	--
Shasta.....	2	--	2	--	--	--
Solano.....	5	--	5	--	--	--
Sonoma.....	1	--	1	--	--	--
Sutter.....	1	--	1	--	--	--
Tehama.....	4	--	4	--	--	--
Trinity.....	1	--	1	--	--	--
Tulare.....	1	--	1	--	--	--
Tuolumne.....	1	--	1	--	--	--
Ventura.....	1	--	1	--	--	--

SOURCE: State of California, Department of Public Health, Epidemiologic Reports of Cases of Animal Rabies (Form ACD-77) and unreported cases confirmed by laboratory examination by the Division of Laboratories, California State Department of Public Health.

Recent Additions to Department Film Library Now Available for Loan

The following films and filmstrips have been added to the department's film library and may be obtained by writing the Bureau of Health Education, State Department of Public Health, 2151 Berkeley Way, Berkeley 4.

BOY WITH A KNIFE 19 minutes 1957

This film shows how a group worker reaches a gang of boys who are headed for delinquency, how he works and what obstacles he encounters, as well as limitations he must accept. A case story from the files of the Los Angeles Youth Service Agency is re-enacted, showing how disturbed youngsters protect themselves with an attitude of toughness, looking for security in "exclusive" gangs. International Film Bureau, sponsored by Community Chest of Los Angeles. For citizens' groups, mental health associations, P. T. A.'s, social welfare agencies and nonprofessionals who work with youth.

COLLECTING SPECIMENS FOR VIRUS DIAGNOSIS Filmstrip Sound Color 58 frames 1956

The importance of proper collection, preservation and packing of specimens sent to the laboratory for virus diagnosis, and the importance of sending complete data with the specimen is stressed. Communicable Disease Center, U. S. Public Health Service, suitable for professional education, physicians and technicians.

HUMAN HEREDITY Color 18 minutes 1956

This film is designed to illustrate the basic concepts of heredity. The difference between true heredity characteristics and cultural differences is shown. How the sex of a new individual is established is clearly illustrated. The film is an excellent introduction into the study of genetics. Animated drawings as well as actors are used to illustrate the material. A discussion guide is provided with the film. The film's ending leads naturally into a discussion period which requires a well-informed person to answer questions. E. C. Brown Trust, Portland, Oregon. For junior high, high school, and college students, and adults.

KITCHEN HABITS Color 12 minutes 1954

The importance of developing good habits relating to food sanitation is shown under actual operating conditions in the kitchen. Individual awareness of personal responsibility and effective supervision to develop proper habits is stressed. Produced in order to depict for sanitarians, sanitary engineers, and other health department personnel desirable kitchen habits. United States Public Health Service. For institutional and restaurant food personnel training.

LET'S DISCUSS IT 25 minutes 1956

This film demonstrates methods whereby health and active discussion groups can

be developed. The camera moves between two groups to illustrate factors which encourage, and discourage participation. The film describes the steps to take in organizing a group, and suggests rules which a discussion leader might follow. National Film Board of Canada. For college students and adult groups.

NO TIME TO SPARE 15 minutes 1956

Demonstrates new method of artificial respiration, showing steps to take, and emphasizing the need for speed in starting. Dramatic sequences enhance motivation for learning correct techniques, which are clearly demonstrated. Canadian Life Insurance Companies of Canada. For high school, college students, and adults.

NONSYPHILITIC VENEREAL DISEASES Color 30 minutes 1956

This film discusses the etiology, pathology, diagnosis and present-day treatment of the four most common venereal diseases which are not of syphilitic origin. E. R. Squibb & Sons. Limited to medical and technical-professional groups.

OUTBREAK OF SALMONELLA, AN Color 14 minutes 1954

Study case of a simulated typical outbreak of food-borne illness caused by organisms of the Salmonella group. Source and means of contamination; factors contributing to the survival and transfer of the organism; important conditions of environment and general food handling practices, and effects of the outbreak. Communicable Disease Center, U. S. Public Health Service. For sanitarians and food personnel training.

OVERWEIGHT 28 minutes 1953

This is a kinescope of the 1953 *March of Medicine* presentation. The dangers of overweight, the psychology of overeating and experiments on these problems are discussed. A final sequence is shown describing group therapy in action. Smith, Kline and French. For college students, adults, and professional groups.

PROUD YEARS, THE 28 minutes 1956

This film looks at the problem of those whose parents are reaching their 70th and 80th birthdays. It provides a means by which old people and their families can explore together the day-to-day problems that accompany old age, to lead them to a mutual understanding. Center for Mass Communication, Columbia University Press. For all groups concerned with care for the aged.

PUBLIC HEALTH ASPECTS OF MIGRANT FARM WORKERS, THE 16 minutes 1955

This film shows how communicable diseases can be discovered and controlled in the migrant labor group. The film explains problems of disease control which migrant laborers have created throughout the Country for many years. Since they are transients, they do not enjoy the normal rights of citizenship. Anything done to solve these problems must be beyond that provided citizens by law. Communicable Disease Center, U. S. Public Health Service. For public health training activities, medi-

cal societies, state and local health departments.

RABIES 14½ minutes 1957

The film has a good educational approach—designed to give the "musts" for public responsibility in rabies control. The film encourages immunization of pets and acquaints the viewer with danger signs of rabid dogs. Larribob Productions, Inc. For elementary and high schools.

RABIES CONTROL IN THE COMMUNITY 11 minutes 1956

This film has two main objectives: (1) To establish the importance of rabies as a community public health problem. (2) To promote the proven three-point program for control of rabies on a community basis. Primarily a motivational film, it is not designed for technical training, for use in medical schools nor for television. It shows actual cases of rabies in both humans and dogs, how apathy of dog owners can permit rabies to become a community problem, and how concerted community action can prevent rabies. Communicable Disease Center, U. S. Public Health Service. For public health veterinarians and practicing veterinarians.

SCHOOL THAT WENT TO TOWN, THE 15 minutes 1956

Deals with teaching of health in the elementary school. It records health-related activities in a third grade classroom over the course of a year and shows how the teacher was able to make learning a continually rewarding adventure. Michigan Department of Health. For college students, P. T. A., and adult groups.

SIBLING RELATIONS AND PERSONALITY 22 minutes 1956

In a series of case studies, this film demonstrates the relationships a child has with his brothers and sisters throughout developmental years. These relationships are an important factor in personality shaping. Emphasis is placed on the importance of understanding complex personality influences in helping youngsters through childhood and adolescence.

SOMEONE WHO CARES 21 minutes 1955

This film describes some of the varied activities which can be carried on in hospitals by volunteers and the process of recruiting, orienting, and training new volunteers. Indiana University Audio-Visual Center in collaboration with the Indiana Association for Mental Health and the Indiana State Division of Mental Health. For adult groups, including churches, clubs, and colleges.

STRESS 11 minutes 1957

This film introduces Dr. Selye's theory of the relation of stress to disease. It retells his discovery of what is now known as the General Adaptation Syndrome, and how this led to the now widely investigated effects of stress, body hormones, and the occurrence of disease. Third dimensional diagrams help make clear the relations between the factors. Selye himself tells his story in some sequences. McGraw-Hill. Of

general interest to those concerned with medical research.

SYPHILITIC VENEREAL DISEASE Color 25 minutes 1956

This film was produced to organize and clarify for the physician the stages and types of syphilis. Correct diagnoses and proper treatment are discussed. E. R. Squibb & Sons. Good for use by medical and technical professional groups.

TO YOUR HEALTH Color 11 minutes 1956

Underscoring the medically-accepted concept of the alcoholic as a sick person, the film points out that for some people alcohol serves as an anesthetic, blotting out feelings and tensions they have not been able to work out in a constructive way. The film discusses the physiologic aspects of alcohol and the broad subject of alcohol and alcoholism. Because of the very comprehensive treatment of the subject this film should be used to initiate discussion under the leadership of a person who is thoroughly familiar with the medical and scientific knowledge of the subject. World Health Organization. For interested groups, students, professional nursing and social work groups, social and community groups, health department, and hospital staffs, etc.

UNCONDITIONAL SURRENDER 24 minutes 1956

This film pictures the step-by-step manufacture of polio vaccine in a large pharmaceutical laboratory, and licensing procedure of the National Institutes of Health. A dramatic lesson in science made easy for the layman, of interest to professional groups, as well. (Spanish version available.) National Foundation for Infantile Paralysis. For high schools, colleges, professional groups, adult groups.

VISIT TO THE WATERWORKS, A Color 11 minutes 1956

This film emphasizes the importance of safe drinking water to our health. Encyclopedia Britannica Films. For primary and middle grades' social studies classes and elementary science courses.

YOUR BABY'S BATH Color 12 minutes 1956

This film gives general instructions in bathing the small infant. Included are assembly and arrangement of necessary items and equipment; steps and safety precautions in bathing the baby. Five Star Production sponsored by Pet Milk Company. For high school, college, and parents.

Well Worth Reading

Many of you may have read "Some Pointers for Professionals," by Letha L. Patterson; for those of you who have not seen this excellent article may we suggest that it is well worth reading. Mrs. Patterson is a mother of a retarded child and her article is directed to those professionals working in this field. However, her

Nation Spends 15 Billion For Medical Care

The cost of medical care in the United States during 1955 has been placed at \$15,000,000,000, according to a special report issued by the American Medical Association; \$11,200,000,000 of the total was spent for private care and \$3,900,000,000 for public care, including federal, state and local.

A breakdown of the private care costs for 1955 revealed \$3,400,000,000 for physicians' charges, \$3,700,000,000 for hospital charges, \$2,300,000,000 for charges for drugs and appliances, and \$1,800,000,000 for other charges, including such expenses as nursing.

Summer Course Offered

San Francisco State College will offer summer courses meeting standards recommended for the preparation of teachers of partially seeing children in 1957, according to information received by the National Society for the Prevention of Blindness.

The National Society's Committee on Education of Partially Seeing Children has recently estimated that of the 70,000 partially seeing children in the United States, only 8,000 are being served by qualified teachers.

Scholarships for these courses are available from the Delta Gamma Foundation, 1820 N. W. Boulevard, Columbus 12, Ohio, and from some local Lions Clubs.

points are extremely well taken and are applicable to all. They are:

1. Tell us the nature of our problem as soon as possible.
2. Always see both parents.
3. Watch your language.
4. Help us to see that this is OUR problem.
5. Help us to understand our problem.
6. Know your resources.
7. Never put us on the defensive.
8. Remember that parents of retarded children are just people.
9. Remember that we are parents and that you are professionals.
10. Remember the importance of your attitude toward us.

Mrs. Patterson's article appeared in *Children*, Vol. 3, No. 1.

May 31st Deadline for Filing

Applications for assistance from state and federal funds under the Hospital Construction Program must be filed with the California State Department of Public Health prior to May 31, 1957, in order to qualify for consideration in the allocation of funds for the Fiscal Year July 1, 1957-1958.

The following categories are eligible for assistance under the program: general hospitals, mental hospitals, tuberculosis hospitals, chronic disease hospitals, nursing homes, diagnostic and treatment centers, rehabilitation centers, and public health centers.

Applications and assistance in filing may be obtained from the Bureau of Hospitals, California State Department of Public Health, 2151 Berkeley Way, Berkeley 4.

Poultry-borne Disease Outbreaks

Concern has been expressed about eight recent outbreaks of food poisoning which were attributed to the consumption of turkey, five of which were similar to a number of the school lunchroom outbreaks occurring in 1953. The symptoms reported in these outbreaks—abdominal cramps, flatulent diarrhea, and little or no vomiting with an incubation period of eight to ten hours and complete recovery in a relatively short time—are characteristic of food poisoning caused by *Clostridium Welchii*. Most laboratories do not examine food samples for this organism.

Since *C. Welchii* is widespread in nature and may be often present on processed poultry, the National Office of Vital Statistics plans to alert laboratories to the possibility that *C. Welchii* may be causing some of the poultry-borne disease outbreaks.

Utensils Blamed

A report from Oregon emphasizes the dangers of using chipped "granite ware" utensils for cooking or storage of food and drink. Twenty school children suffered from antimony poisoning after drinking a popular home-mix style soft drink which had been stored for seven and a half days in a "granite ware" coffee pot.

Dr. Merrill Serves on Air Pollution Committee

Malcolm H. Merrill, M.D., State Director of Public Health, has been appointed by the Surgeon General to serve as a member of the proposed National Advisory Committee on Community Air Pollution. The committee is to be established under Public Law 159, 84th Congress, to review air pollution program objectives, activities and policies and advise the Surgeon General.

The committee, composed of 12 members, will have representatives from state and local government air pollution control agencies, universities, industry, professional associations, and private consulting firms.

Seepage Pit Study

A study of the performance of seepage pits, leaching beds and distribution boxes was begun by the U. S. Public Health Service in Los Angeles and Santa Clara Counties early this year. Present plans call for expansion of the study to include Fresno and Sacramento Counties.

The study, financed by the Federal Housing Administration, is being undertaken to develop practical design criteria for individual sewage disposal systems.

Elements of the three-phase study are: to test the performance of seepage pits for percolation (the rate the effluent flows into the soil from the pit) of septic tank effluent; to study the performance of a prepared leaching bed of large area and shallow depth; and to determine whether distribution boxes in a leaching system

improve the performance of the disposal system.

Field tests will include detailed examinations of a variety of systems in different soil conditions and an extensive review of the history of these systems including the frequency of failure.

Public Health Positions

Contra Costa County

Public Health Nurse: Salary range, \$377 to \$453. Requires R. N. and P. H. N. certificates and driver's license. Continuous testing anywhere in the United States.

Chief Health Educator: Salary range, \$519 to \$624. Requires one year graduate study in Public Health Education and three years experience in Public Health Education.

Health Educator: Salary range, \$453 to \$543. Requires Master's degree in Public Health Education.

Apply Contra Costa County Civil Service, Box 710, Martinez.

King County

Public Health Bacteriologist: Salary open. One person laboratory with assistant. Must be eligible for California certificate.

Public Health Nurse: Salary range, \$359 to \$411. Starting salary commensurate with qualifications. Must be eligible for P. H. N. and R. N. certification in California.

For information write Kings County Health Department, Hanford.

Mendocino County

Health Officer: Salary open, depending on experience and training.

County Physician: Starting salary \$12,600 to \$13,200 depending on individual qualifications.

For further information write Joseph Hartley, Chairman, Health and Hospital Committee, Hopland.

Napa County

Public Health Nurse: Salary range, \$341 to \$415; starting salary dependent on training and experience. Generalized program. Automobile required; car allowance. For job description and application write Sterling S.

Cook, M.D., Director of Public Health, P. O. Box 749, Napa.

San Diego County

Physician I: Salary range, \$647 to \$713; \$679 to \$749 if certified by appropriate American board. Preference will be given to candidates who have had successful medical experience in the field of public health. Write Civil Service Office, Room 403, Civic Center, San Diego.

Santa Barbara County

Supervising Public Health Nurse: Salary range, \$392 to \$478.

Public Health Nurse: Salary range, \$355 to \$433. Generalized program including schools. Contact Petronilla Commins, Director, Public Health Nursing, Santa Barbara County Health Department, Santa Barbara.

GOODWIN J. KNIGHT, Governor
MALCOLM H. MERRILL, M.D., M.P.H.
State Director of Public Health

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